

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 9/8/06 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 1, the term "the strips" and "the longitudinal dimension" lacks antecedent basis in the claim.

5. Regarding claim 2, the term "the strips" in line 2 lacks antecedent basis in the claim.

6. Regarding claim 3, the term "the width and height" in line 3 lacks antecedent basis in the claim.

7. Regarding claim 4, the term "the length" in line 2 lacks antecedent basis in the claim.

8. Regarding claim 5, the term "the ends" and "the first and second strips" lacks antecedent basis in the claim.

9. Regarding claim 6, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

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10. Regarding claim 8, the term "the material", "the invention", "the range", "the volume", and "the length, width, and height" lacks antecedent basis in the claim.

11. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 recites the broad recitation "the range of 35% to 55%", and the claim also recites "more preferably substantially 45%", which is the narrower statement of the range/limitation.

12. Claim 7 is considered indefinite since it depends from an indefinite base claim.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munroe (2,997,266) in view of Dubois (2,272,203). Munroe teach(es) the structure substantially as claimed, including a bolster comprising first (18) and second (22) elongate strips extending substantially parallel to each other and spaced apart thereby defining a gap therebetween, a plurality of ribs (16 except adjacent ends of 14) extending between the strips at spaced apart locations along the length of the gap characterised by endpieces (16 adjacent the ends of 14) located between respective corresponding ends of the first and second strips. The only difference between Munroe and the invention as claimed is that Munroe fail(s) to teach endpieces substantially longer than the ribs, in the longitudinal dimension of the bolster. Dubois, however, teaches making the endpieces (A) of a bolster substantially longer than a rib (B), in the longitudinal dimension of the bolster. It would have been obvious to one of ordinary skill in the art to lengthen the endpieces of Munroe, as taught by Dubois, in order to provide additional structural reinforcement to the ends thereof, thereby providing the structure substantially as claimed.

16. Regarding claim 2, Munroe teaches strips (18, 22) of substantially rectangular cross-section and oriented such that respective elongate principal faces of the strips face each other.

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17. Regarding claim 3, Munroe teaches ribs & endpieces (16) that are substantially cuboid and are dimensioned to extend substantially across the width and height of the gap. Whereas each rib & endpiece of Munroe, excepting Item 26 thereof, is substantially a rectangular parallelepiped, it can therefore be said that the said ribs & endpieces are "substantially cuboid".

18. Regarding claim 4, Munroe as modified by Dubois teaches endpieces longer than the ribs thereof. Although Munroe & Dubois fail to clearly teach a length of the endpieces being substantially three or four times the length of the ribs, in the longitudinal dimension of the bolster, the examiner points out that the practice of varying the sizes of ribs & endpieces of a pallet is well-known in the art. It would have been an obvious design consideration to one of ordinary skill in the art to modify bolsters of Munroe as modified by Dubois, by making the endpieces thereof 3-4 times longer than the ribs thereof, depending on the desired needs of the person constructing the bolsters (e.g., intended use of the bolsters, structural strength, compactness, ease of manufacture, etc.), thereby providing the structure substantially as claimed.

19. Regarding claim 5, Munroe teaches endpieces (16) each comprising two or more superimposed cuboid sections, arranged on top of each other to span the gap between the ends of the first and second strips. It is noted that whereas both the portion of 16 above 26, along with the remainder of 16, can each be deemed distinct "cuboid sections", it can therefore be said that the endpieces of Munroe as modified by Dubois comprise "two or more superimposed cuboid sections".

20. Regarding claim 6, Munroe teaches a bolster comprising timber. See col. 3, line 59.

21. Regarding claim 7, Munroe teaches securing the elements of the bolster together by glue. See col. 4, line 13.

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22. Regarding claim 8, Munroe as modified by Dubois teaches bolsters. Although Munroe & Dubois fail to clearly teach a bolster wherein the material thereof occupies in the range of 35% to 55% more preferably substantially 45%, of the volume defined by the length, width and height of the bolster, the examiner points out that discovering the optimum value, or the optimum or workable ranges, of a result effective variable, has been held to involve only routine skill in the art. As such, it therefore would have been an obvious design consideration to one of ordinary skill in the art to modify bolsters of Munroe as modified by Dubois, such that the material thereof occupied substantially 45% of the volume thereof, depending on the desired needs of the person constructing the bolsters (e.g., intended use of the bolsters, structural strength, compactness, ease of manufacture, etc.), thereby providing the structure substantially as claimed.

23. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (2003/0177958) in view of Dubois (2,272,203). Adams teach(es) the structure substantially as claimed, including a bolster comprising first (18) and second (20) elongate strips extending substantially parallel to each other and spaced apart thereby defining a gap therebetween, a plurality of ribs (32 except adjacent ends of 10) extending between the strips at spaced apart locations along the length of the gap characterised by endpieces (32 adjacent the ends of 10) located between respective corresponding ends of the first and second strips. The only difference between Adams and the invention as claimed is that Adams fail(s) to teach endpieces substantially longer than the ribs, in the longitudinal dimension of the bolster. Dubois, however, teaches making the endpieces (A) of a bolster substantially longer than a rib (B), in the longitudinal dimension of the bolster. It would have been obvious to one of ordinary skill in the art to lengthen the endpieces of Adams, as taught by Dubois, in order to provide additional

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structural reinforcement to the ends thereof, thereby providing the structure substantially as claimed.

24. Regarding claim 9, whereas Adams as modified by Dubois teach(es) all aspects of the structure associated with the method claimed therein, it therefore would have been obvious to one of ordinary skill in the art, in view of the structure of Adams as modified by Dubois, to utilize said structure via the method claimed by applicant, thereby providing the method substantially as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW W. ING whose telephone number is (571)272-6536. The examiner can normally be reached on Monday through Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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17 October 2008

/José V. Chen/

Primary Examiner, Art Unit 3637